2016

AQ0030

2016 PAPOOSE CREEK DATA

COARSE WOODY HABITAT FIELD FORM

Entered by C F 08/10/16

Stream Papoose Cr			**Site** US			**Date** 08/10/15	
BF width	3.4 m	**BF depth**	1/2 0.31 m	**FP width**	5.9 m	**Gradient**	4 %
W/D Ratio:	7.08	1/4 0.40 m	3/4 0.48 m	**Entrenchment Ratio:**			
Pool Quality							
>1m deep with good cover							
>1m deep with inadequate cover							
<1m deep	IIII						

Wood Habitat								
Length (m)	8.7	1.3	3.0	1.3	8.5	4.4	4.2	1.2
Diameter (cm)	37.0	15.6	13.8	13.8	19.2	43.6	18.1	23.1
Elevation (cm)	Ø	-15	Ø	Ø	+460	Ø	+25	Ø
Braced?	NO	YES	YES	NO	NO	YES	YES	NO
Rootwad?	NO	NO	NO	NO	NO	NO	NO	NO
Length (m)	4.7	15	6.1	5.3	3.0	9.5	3.6	1.4
Diameter (cm)	46.8	31.6	60.1	18.0	34.8	40.6	31.3	16.8
Elevation (cm)	+35	-10	+80	+120	Ø	+200	Ø	Ø
Braced?	NO	NO	NO	NO	YES	NO	NO	NO
Rootwad?	NO	NO	NO	NO	NO	NO	NO	NO
Length (m)	2.7	4.5	7.0	1.3	4.1	5.8	6.0	3.5
Diameter (cm)	12.0	11.8	28.9	13.1	39.0	12.6	45.0	26.5
Elevation (cm)	+5	+10	+20	-10	Ø	-25	Ø	Ø
Braced?	NO	NO	NO	NO	NO	NO	NO	NO
Rootwad?	NO	NO	NO	NO	NO	NO	NO	NO
Length (m)	2.5							
Diameter (cm)	11.5							
Elevation (cm)	+40							
Braced?	NO							
Rootwad?	NO							

Erosion Features Contributing to Stream

Dimensions: **Lat:** **Lon:**

Photo #: **GPS Waypoint #:**

Type: ☐ Bank shear / sluff ☐ Headcut ☐ Rill ☐ Major deposition ☑ Other: NONE

Source: ☐ Hoof action ☐ Grazing ☐ Road surface ☐ Road-stream crossing ☐ System road ☐ Non-system road ☐ Other: ______

% Bare Ground: <10% **Dominant understory vegetation:** Op. Shrub

Notes: No signs of erosion. Site is remote and heavily vegetated. Bare ground consists of bare / steep rock faces.

PFANKUCH STREAM CHANNEL STABILITY FORM

Stream: Date: Surveyor:
Reach: GPS Location (Degrees): N W

	Variable	Excellent		Good		Fair		Poor	
Upper Banks	Landform Slope	Bank slope gradient <30%	2	Bank slope gradient 30-40%	4	Bank slope gradient 40-60%	6	Bank slope gradient >60%	8
	Mass-Wasting	No evidence of post or any potential for future mass-wasting into channel	3	Infrequent and/or very small. Mostly healed over w/low future potential	6	Moderate frequency and size, with some raw spots eroded by water during high flows	9	Frequent or large, causing sediment OR imminent danger of same	12
	Debris Jam potential	Essentially absent from immediate channel area	2	Present but mostly small twigs and limbs	4	Present, volume and size are both increasing	6	Moderate to heavy amounts, mainly larger sizes	8
	Vegetative Bank Protection	>90% plant density. Vigor and variety suggests a deep, dense soil-binding root mass	3	70-90% density. Fewer plant species or lower vigor suggests a less dense or deep root mass	6	50-70% density. Lower vigor and species form a somewhat shallow and discontinuous root mass	9	<50% density plus fewer species and vigor indicate discontinuous and shallow root mass	12
	Channel Capacity	Ample for present plus some increases. Peak flows contained. W/D ratio <7	1	Adequate. Overbank flows rare. W/D ratio 8-15	2	Barely contains present peaks. Occasional overbank floods. W/D ratio 15-25	3	Inadequate. Overbank flows common. W/D ratio >25	4
Lower Banks	Bank Rock Content	65% with large, angular boulders; 30cm numerous	2	40-65%, mostly small boulders to cobbles, 15-30cm	4	20-40%, with most in the 7.5-15cm class	6	<20% rock fragments of gravel sizes, 2.5-7.5cm	8
	Obstructions (Flow deflectors and sediment traps)	rocks and old logs firmly embedded. Flow pattern without cutting or deposition. Pools and riffles stable	2	Some present, causing erosive cross currents and minor pool filling. Obstructions and deflectors newer and less firm	4	Moderately frequent, unstable obstructions and deflectors move with high water causing bank cutting and filling of pools	6	Frequent obstructions and deflectors cause bank erosion. Sediment traps full channel migration occuring.	8
	Undercutting	Little or none evident. Infrequent raw banks <150cm high	4	Some, intermittently at outcurves and constrictions. Raw banks <30cm	8	Significant. Cuts 15-30cm high. Root mat overhangs and sloughing evident	12	Almost continuous cuts, some >30cm high. Failure of overhangs	16
	Deposition	Little or no enlargement of channel or point bars	4	Some new increase in bar formation, mostly from coarse gravel	8	Moderate deposition of new gravel and coarse sand on bars	12	Extensive deposits of predominantly fine particles	16
Stream Bed	Rock Angularity	Sharp edges and corners, plane surfaces roughened	1	Rounded corners and edges. Smooth and flat	2	Corners and edges well rounded in two dimensions	3	Well rounded in all dimensions	4
	Brightness	Surfaces dull, darkened, or stained. Not bright	1	Mostly dull, but may have up to 35% bright surfaces	2	Mixture, 50-65% bright surfaces	3	Predominantly bright, 65%, exposed surfaces	4
	Consolidation or particle packing	Assorted sizes tightly packed and/or overlapping	2	Moderately packed, with some overlapping	4	Mostly loose assortment with no apparent overlap	6	No packing evident. Loose, easily moved	8
	Bottom Size Distribution & Stability	No change in sizes evident. Stable materials 80-100%	4	Distribution shift slight. Stable materials 50-80%	8	Moderate change in sizes. Stable materials 20-50%	12	Marked change. Stable materials 0-20%	16
	Scouring and Deposition	<5% of the bottom affected by scouring and deposition	6	5-30% affected. Scour at constrictions and where steep. Pool deposition	12	30-50% affected, deposits and scour at obstructions, and constrictions	18	>50% of bed in a state of flux or change nearly year-long	24
	Clinging Aquatic Vegetation (moss and algae)	Abundant, growth largely moss, dark green, perennial, and in swift water too	1	Common, algal forms in low velocity and pool areas. Moss and swift waters	2	Present, but mostly spotty in backwater areas. Seasonal blooms	3	Perennial types scarce or absent. Yellow-green short term bloom present	4
	Column Totals								

Total Score: 90
Notes:

Reach Score of: <38 = Excellent, 39-76 = Good, 77-114 = Fair, 115+ = Poor

8/8

Stream: Papo+A1:J22ose Creek **Date: 08/10/2016** **Surveyor: Aquatics 2016**
Reach: Upstream **GPS Location (Degrees): N 45.38853 W 116.43603**

	Variable	Excellent		Good		Fair		Poor	
Upper Banks	Landform Slope	Bank slope gradient <30%		Bank slope gradient 30-40%		Bank slope gradient 40-60%	6	Bank slope gradient >60%	
	Mass-Wasting	No evidence of post or any potential for future mass-wasting into channel	3	Infrequent and/or very small. Mostly healed over w/low future potential		Moderate frequency and size, with some raw spots eroded by water during high flows		Frequent or large, causing sediment OR imminent danger of same	
	Debris Jam potential	Essentially absent from immediate channel area		Present but mostly small twigs and limbs		Present, volume and size are both increasing		Moderate to heavy amounts, mainly larger sizes	8
	Vegetative Bank Protection	>90% plant density. Vigor and variety suggests a deep, dense soil-binding root mass	3	70-90% density. Fewer plant species or lower vigor suggests a less dense or deep root mass		50-70% density. Lower vigor and species form a somewhat shallow and discontinuous root mass		<50% density plus fewer species and vigor indicate discontinuous and shallow root mass	
	Channel Capacity	Ample for present plus some increases. Peak flows contained. W/D ratio <7		Adequate. Overbank flows rare. W/D ratio 8-15	2	Barely contains present peaks. Occasional overbank floods. W/D ratio 15-25		Inadequate. Overbank flows common. W/D ratio >25	

Lower Banks	Bank Rock Content	65% with large, angular boulders; 30cm numerous		40-65%, mostly small boulders to cobbles, 15-30cm	4	20-40%, with most in the 7.5-15cm class		<20% rock fragments of gravel sizes, 2.5-7.5cm	
	Obstructions (Flow deflectors and sediment traps)	rocks and old logs firmly embedded. Flow pattern without cutting or deposition. Pools and riffles stable		Some present, causing erosive cross currents and minor pool filling. Obstructions and deflectors newer and less firm	4	Moderately frequent, unstable obstructions and deflectors move with high water causing bank cutting and filling of pools		Frequent obstructions and deflectors cause bank erosion. Sediment traps full channel migration occuring.	
	Undercutting	Little or none evident. Infrequent raw banks <150cm high		Some, intermittently at outcurves and constrictions. Raw banks <30cm	8	Significant. Cuts 15-30cm high. Root mat overhangs and sloughing evident		Almost continuous cuts, some >30cm high. Failure of overhangs	
	Deposition	Little or no enlargement of channel or point bars		Some new increase in bar formation, mostly from coarse gravel		Moderate deposition of new gravel and coarse sand on bars	#	Extensive deposits of predominantly fine particles	
Stream Bed	Rock Angularity	Sharp edges and corners, plane surfaces roughened		Rounded corners and edges. Smooth and flat	2	Corners and edges well rounded in two dimensions		Well rounded in all dimensions	
	Brightness	Surfaces dull, darkened, or stained.		Mostly dull, but may have up to 35% bright	2	Mixture, 50-65% bright surfaces		Predominantly bright, 65% exposed surface	
	Consolidation or particle packing	Assorted sizes tightly packed and/or overlapping		Moderately packed, with some overlapping	4	Mostly loose assortment with no apparent overlap		No packing evident. Loose, easily moved	
	Bottom Size Distribution & Stability	No change in sizes evident. Stable materials 80-100%		Distribution shift slight. Stable materials 50-80%		Moderate change in sizes. Stable materials 20-50%	#	Marked change. Stable materials 0-20%	
	Scouring and Deposition	<5% of the bottom affected by scouring and deposition		5-30% affected. Scour at constrictions and where steep. Pool deposition		30-50% affected, deposits and scour at obstructions, and constrictions	#	>50% of bed in a state of flux or change nearly year-long	
	Clinging Aquatic Vegetation (moss and algae)	Abundant, growth largely moss, dark green, perennial, and in swift water too		Common, algal forms in low velocity and pool areas. Moss and swift waters	2	Present, but mostly spotty in backwater areas. Seasonal blooms		Perennial types scarce or absent. Yellow-green short term bloom present	

Data entered
D6 - 8/31/16

Stream	Papoose Cr			Site	DS		Date	07/25/16
BF width	2.8m	BF depth	11 3/4 0.10m 3/4 0.12m	FP width	3.8m	Gradient		
W/D Ratio:	11.2	11/4 0.25m		Entrenchment Ratio:				
Rosgen Stream Class:								
Pool Quality								
>1m deep with good cover								
>1m deep with inadequate cover								
<1m deep	NA							
Wood Habitat								
Length	4.9m	7.3m	7.4m	5.7m	7.2m	4.0m	2.9m	6.5m
Diameter	11cm	12cm	50cm	54cm	12cm	37cm	16cm	34cm
Elevation	Ø cm	+43cm	+74cm	+70cm	+79cm	+40cm	+11cm	+6cm
Braced?	NO	NO	NO	NO	NO	NO	NO	NO
Rootwad?	NO	YES	NO	NO	NO	NO	NO	NO
Length	11.1m	2.2m	6.1m	2.7m	8.5m			
Diameter	41cm	20cm	35cm	168cm	16.8cm			
Elevation	+35cm	+2cm	+15cm	-16cm	Ø cm			
Braced?	YES	YES	YES	YES	NO			
Rootwad?	YES	NO	NO	NO	NO			
Length								
Diameter								
Elevation								
Braced?								
Rootwad?								
Erosion Features Contributing to Stream								
Dimensions:				Lat: 45.39752		Lon: 116.41055		
Photo #:		GPS Waypoint #:		☞ see additional pics ☜				
Type:	☐ Bank shear / sluff	☐ Headcut	☐ Rill	☐ Major deposition	☐ Other:_____			
Source:	☑ Hoof action	☐ Grazing	☐ Road surface	☐ Road-stream crossing	☐ System road	☐ Non-system road	☐ Other:_____	
% Bare Ground:	<1%	Dominant understory vegetation:						
Notes:	~5 areas between 0 - 40m on tape							

7 of 9

PE-D6
8/3/16

PFANKUCH STREAM CHANNEL STABILITY FORM

Stream: Papoose Ck **Date:** 07/25/2016 **Surveyor:** Aquatics

Reach: D5 **GPS Location (Degrees):** N 45.39757 W 116.41055

UPPER BANKS	EXCELLENT		GOOD		FAIR		POOR	
Landform slope	Bank slope gradient <30%	2	Bank slope gradient 30-40%	4	Bank slope gradient 40-60%	6	Bank slope gradient >60%	8
Mass-wasting (existing or potential)	No evidence of post or any potential for future mass-wasting into channel.	3	Infrequent and/or very small. Mostly healed over. Low future potential.	6	Moderate frequency and size, with some raw spots eroded by water during high flows.	9	Frequent or large, causing sediment OR imminent danger of same.	12
Debris jam potential (floatable objects)	Essentially absent from immediate channel area.	2	Present but mostly small twigs and limbs.	4	Present, volume and size are both increasing.	6	Moderate to heavy amounts, mainly larger sizes.	8
Vegetative bank protection	>90% plant density. Vigor and variety suggests a deep, dense, soil binding root mass.	3	70-90% density. Fewer plant species or lower vigor suggests a less dense or deep root mass.	6	50-70% density. Lower vigor and species form a somewhat shallow and discontinuous root mass.	9	<50% density plus fewer species and vigor indicate discontinuous and shallow root mass.	12
Channel capacity **LOWER BANKS**	Ample for present plus some increases. Peak flows contained. Width to Depth (W/D) ratio <7.	1	Adequate. Overbank flows rare. W/D ratio 8 to 15.	2	Barely contains present peaks. Occasional over-bank floods. W/D ratio 15 to 25.	3	Inadequate. Overbank flows common. W/D ratio >25.	4
Bank rock content	65% with large, angular boulders 30cm numerous.	2	40 to 65%, mostly small boulders to cobbles 15-30cm.	4	20 to 40%, with most in the 7.5-15cm diameter class.	6	<20% rock fragments of gravel sizes, 2.5-7.5 cm or less.	8
Obstructions (flow deflectors Sediment traps)	Rocks and old logs firmly embedded. Flow pattern without cutting or deposition. Pools and riffles stable.	2	Some present, causing erosive cross currents and minor pool filling. Obstructions and deflectors newer and less firm.	4	Moderately frequent, unstable obstructions and deflectors move with high water causing bank cutting and filling of pools.	6	Frequent obstructions and deflectors cause bank erosion. Sediment traps' full channel migration occurring.	8
Undercutting	Little or none evident. Infrequent raw banks <150cm high.	4	Some, intermittently at outcurves and constrictions. Raw banks <30cm.	8	Significant. Cuts 15-30cm high. Root mat overhangs and sloughing evident.	12	Almost continuous cuts, some >30cm high. Failure of overhangs	16
Deposition **STREAM BED**	Little or no enlargement of channel or point bars.	4	Some new increase in bar formation, mostly from coarse gravels.	8	Moderate deposition of new gravel and coarse sand on old and some new bars.	12	Extensive deposits of predominantly fine particles. Accelerated	16
Rock angularity	Sharp edges and corners, plane surfaces roughened.	1	Rounded corners and edges. Smooth and flat.	2	Corners and edges well rounded in two dimensions.	3	Well rounded in all dimensions.	4
Brightness	Surfaces dull, darkened or stained. Not "bright".	1	Mostly dull, but may have up to 35% bright surfaces.	2	Mixture, 50-50% dull and bright i.e. 35-65%.	3	Predominantly bright, 65%, exposed surfaces.	4
Consolidation or particle packing	Assorted sizes tightly packed and/or overlapping.	2	Moderately packed with some overlapping.	4	Mostly a loose assortment with no apparent overlap.	6	No packing evident. Loose, easily moved.	8
Bottom size distribution & stable	No change in sizes evident. Stable materials 80-100%	4	Distribution shift slight. Stable materials 50-80%.	8	Moderate change in sizes. Stable materials 20-50%	12	Marked change. Stable materials 0-20%	16
Scouring and deposition	<5% of the bottom affected by scouring and deposition.	6	5-30% affected. Scour at constrictions and where steep. Pool deposition.	12	30-50% affected. Deposits and scour at obstructions, constrictions, and bends.	18	> 50% of bed in a state of flux or change nearly year-long.	24
Clinging aquatic vegetation (moss and algae)	Abundant, growth largely moss, dark green, perennial. In swift water too.	1	Common. Algal forms in low velocity and pool areas. Moss and swifter waters.	2	Present but spotty, mostly in backwater areas. Seasonal blooms	3	Perennial types scarce or absent. Yellow-green, short term bloom present.	4
COLUMN TOTALS		6		16		60		110

Reach score of: <38 = Excellent, 39-76 = Good, 77-114 = Fair, 115+ = Poor

Total Score: 104

Notes: Erosion Features on back

8/19

IDAHO
Idaho Department of Environmental Quality GIS

SUBBASIN
17060210 - Little Salmon

Final Assessment Unit Status Report 2014

Assessment Unit ID: ID17060210SL001_02

Assessment Unit Name: Little Salmon River - 1st and 2nd order below Round Valley

Assessment Unit Type: RIVER

Assessment Unit Size: 98.54 MILES

Assessment Date: 12/03/2009

This Assessment Unit is in Category: 2

Assessed Beneficial Use	Assessed Date	User Flag	Support Status	Category
Cold Water Aquatic Life	12-03-2009	DESIGNATED	Fully Supporting	2
Secondary Contact Recreation	12-03-2009	PRESUMED	Fully Supporting	2

Monitoring Methods

Idaho WBAGII (January 2002) using BURP data

Beneficial Use Comments

Cold Water Aquatic Life

ID17060210SL001_02. No BURP information exists. Data exists to indicate spawning and rearing of salmonid species in this AU. However, since the data is not current, DEQ will put this assessment unit back in category 5 for sediment and conduct BURP inventory (s) of representative stream(s) in this AU to determine beneficial use support. 12/03/09 Assessment of 2007 BURP data indicate that this stream is fully meeting its CWAL beneficial uses.

Secondary Contact Recreation

Bacteria sample taken at 2007 BURP Site. 5.2 MPN/100ml. HS

Monitoring History (1993 - Present)

BURPID	STREAM	ELEV(ft)	LATITUDE	LONGITUDE	SMIScore	SFIScore	SHIScore	AVGScore
2008SLEWA029	Rattlesnake Creek	2766	45.26794	-116.33800	3	3	3	3.00
2007SBOIA034	North Fork Squaw Creek	3898	45.41824	-116.42431	3	1	3	2.33